

## Operator Training/Qualification

*This guidance is intended to be used by the source workgroups in their consideration of operator training/qualification specific to their sources. The subjects covered by the training (including the hours of training), and the qualification requirements, could vary considering the source category (e.g., turbines, engines, boilers, incinerators, process heaters), the nature of the material burned (e.g., type of fuel or type of waste), the complexity of the source, etc. Consideration should be given to other regulatory or mandated training requirements to ensure consistency and prevent overlap.*

*Specific regulatory language is attached. This is not intended to imply that workgroups must incorporate this language verbatim. Workgroups should determine what specific training elements are applicable for their source category.*

*Note that training/qualification is statutorily required for solid waste incineration units under Clean Air Act Section 129.*

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### Definitions

“Operator” means an individual or individuals whose work duties include the operation, evaluation, and/or adjustment of the combustion system (i.e., boiler, incinerator, process heater, combustion turbine, internal combustion engine)

### General Requirements

1. Operators of an affected source shall be trained and qualified.
2. Training programs and qualification exams shall include the general topics listed below. EPA may designate model training/qualification programs (e.g., developed by professional organizations, trade associations, companies, other organizations, states, etc.). States may approve other training/qualification programs which are substantially equivalent.
3. Training program materials and documentation of qualification shall be maintained and available for inspection when requested.

### Training Content

1. Training shall include, but may not be limited to, the following topics:
  - a. Environmental concerns, including air pollutant emissions;
  - b. Basic combustion principles, including products of combustion;

- c. Operating procedures for the type of device for which the operator is responsible, including proper startup, shutdown, and malfunction procedures;
  - d. Combustion controls and adjustments to minimize emissions;
  - e. Operation of air pollution control equipment and factors affecting its performance;
  - f. Monitoring of emissions, operating parameters, and/or proper functioning of the air pollution control measures;
  - g. Routine inspection, including basic concepts of preventative maintenance, for the affected source, air pollution control devices, and emission monitoring systems;
  - h. Actions to prevent and correct malfunctions or conditions that may lead to malfunction;
  - i. Bottom and fly ash characteristics and handling procedures;
  - j. Applicable air regulatory and permit requirements, including reporting and record keeping requirements;
  - k. Energy management and other pollution prevention measures, as applicable.
2. Reference materials covering the course topics shall be distributed to the trainees.

### Qualification

1. There shall be an examination covering the topics listed above. Examinations shall be administered by an individual or organization other than the trainer. The examiner shall certify that the person taking the exam has independently completed the exam and has demonstrated sufficient knowledge and understanding of the topics listed above.
2. For purposes of this regulation, operators shall be deemed qualified by either:
  - a. Completion of training, including passing the examination; or
  - b. One year experience as an operator of the type of affected source for which the operator is responsible and passing the examination.
  - c. To maintain qualification, an operator shall complete a review or refresher training course at no longer than a 3-year interval, but more often if appropriate.